

REMARKS

Claims 1-10 and 13-15 stand rejected under 35 USC 102(e) as being anticipated by Weber. This rejection is respectfully traversed.

Claim 1 has been amended to claim 1 "a fabric or clothing article made of a plurality of polybenzoxazole polymer fibers, wherein said article has ballistic resistance suitable for use as soft armor and the fibers are untwisted and are of not more than 500 denier." Support for the amendment of claim 1 can be found on page 10, lines 23 and 24. No new matter has been added.

Weber fails to disclose articles made from untwisted polybenzoxazole (PBO) polymer fibers of not more than 500 denier as claimed. In fact Weber actually teaches away from producing articles made from untwisted PBO polymer fibers of not more than 500 denier. Column 5, lines 16-21, of Weber suggests twisting the fibers one or two twists per inch to hold the fibers together. Further, column 5, lines 25-30, advises using yarn with a denier of above 500. In conformity with these disclosures, the Example in Weber used twisted fibers with an average thickness of 1100 denier. Accordingly, Weber fails to disclose an article that includes the combination of untwisted PBO fibers and a denier of not more than 500 denier, as claimed in claim 1.

In addition, the attached declaration of Yukihiro Nomura shows that using both a denier of not more than 500 and untwisted fibers would not be obvious, as the combination produces unexpected results. Mr. Nomura conducted three experiments using PBO fibers. In Experiment 1, the fabric was made with untwisted fibers and a denier of 500. In Experiment 2, the fabric was made from twisted fibers and a denier of 500. Finally, in Experiment 3, the fabric was made from untwisted fibers and a denier of 1000. The Experiments showed that the ballistic resistance of the material, measured as a V50 value, markedly improved when untwisted fibers and a denier of 500 are used in comparison to using just untwisted fibers or just a denier of 500. This shows that unexpected results are obtained by the combination of the claimed denier and the untwisted

fibers. Weber does not suggest that an improvement in ballistic resistance can be obtained by using both a denier of not more than 500 and untwisted fibers.

Since Weber does not disclose or suggest an article made from untwisted fibers with a denier of not more than as claimed, claim 1 should be allowed. Claims 2-10 and 13-15, which depend from claim 1, should be allowed for at least the same reasons.

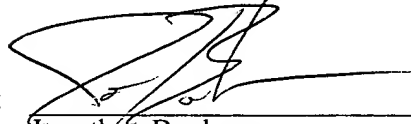
Claims 11 and 12 stand rejected under 35 USC 103(a) as being unpatentable over Weber in view of Dumbar. This rejection is respectfully traversed.

Claims 11 and 12 depend from claim 1 and therefore include all of the limitations of claim 1. As discussed above, claim 1 claims a fabric or clothing article in which the fibers are untwisted and are not more than 500 denier. Weber fails to disclose or suggest a fabric or clothing article in which the fibers are untwisted and have a denier of not more than 500. Dumbar is only cited by the Examiner to show that fibers which are formed into fabrics can be impregnated with a matrix resin. Since Dumbar, like Weber, fails to disclose or suggest a fabric or clothing article in which the fibers are untwisted and are not more than 500 denier, claims 11 and 12 should be allowed over Weber and Dumbar.

For the forgoing reasons, a notice of allowance allowing claims 1-15 in this application is solicited.

In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. 358362001101.

Respectfully submitted,



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